

The diagram illustrates a TDD switching system for a mobile station, labeled 10. The system is divided into several functional blocks and components:

- Donor Antenna (12):** The primary antenna for receiving signals.
- Switching Mechanism:** A switch (16) controlled by "TDD switching" directs the signal path. It can route signals from the Donor Antenna (12) through switch A to the receiver path, or from the transmitter path through switch B back to the Donor Antenna (12).
- Receiver Path (Left Side, enclosed in dashed box 18):**
 - Service Antenna (14):** An auxiliary antenna for receiving signals.
 - LNA (32):** Low Noise Amplifier.
 - Mixer 1 (34):** Multiplies the received signal with LO1/LO2.
 - IF BPF (36):** Intermediate Frequency Band Pass Filter.
 - IF AGC1 (38):** Intermediate Frequency Automatic Gain Control.
- Transmitter Path (Right Side, enclosed in dashed box 20):**
 - IF AGC2 (40):** Intermediate Frequency Automatic Gain Control.
 - Mixer 2 (42):** Multiplies the IF signal with LO1/LO2.
 - PA (44):** Power Amplifier.
- Base band Module (DSP) (26):** The central processing unit that handles the baseband signals. It receives IF signals from the receiver path and sends IF signals to the transmitter path. It also receives control signals (CL, EN, A) and Data from the Synthesizer.
- Synthesizer (28):** Provides the LO1, LO2, and IF signals to the Base band Module (DSP) and the transmitter path. It also receives control signals (CL, EN, A) and Data from the Base band Module (DSP).
- Demod (22) and ADC (24):** The Base band Module (DSP) contains a Demodulator (22) and an Analog-to-Digital Converter (ADC) (24) for processing the received IF signals.

Fig. 1

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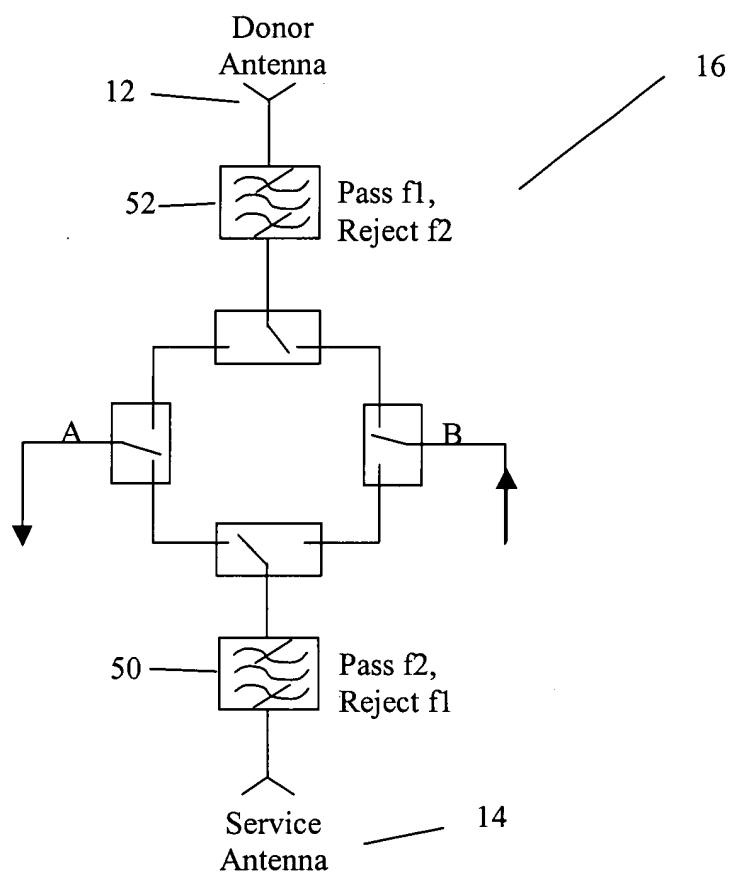


Fig. 2

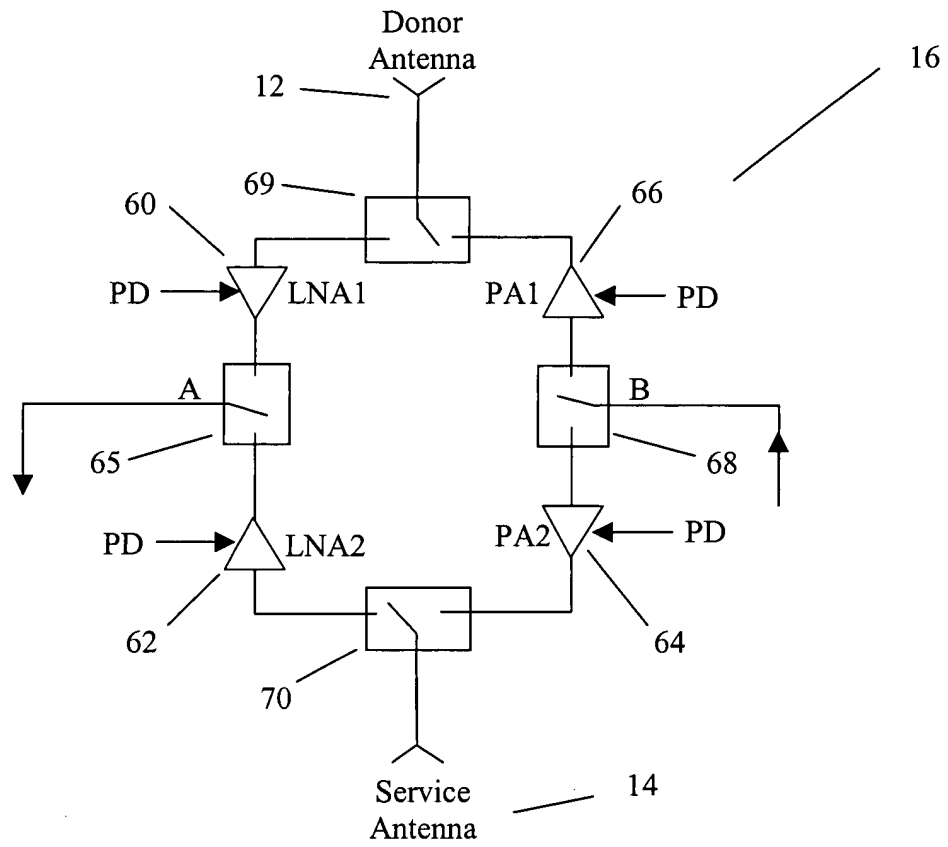


Fig. 3

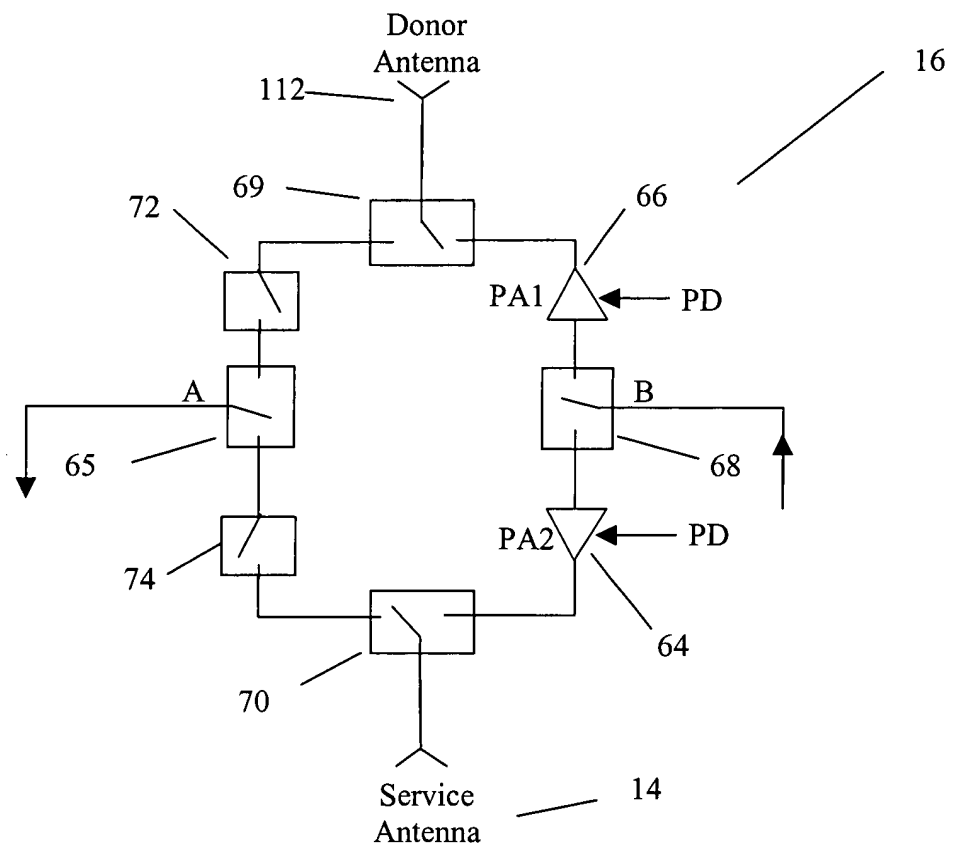


Fig. 4

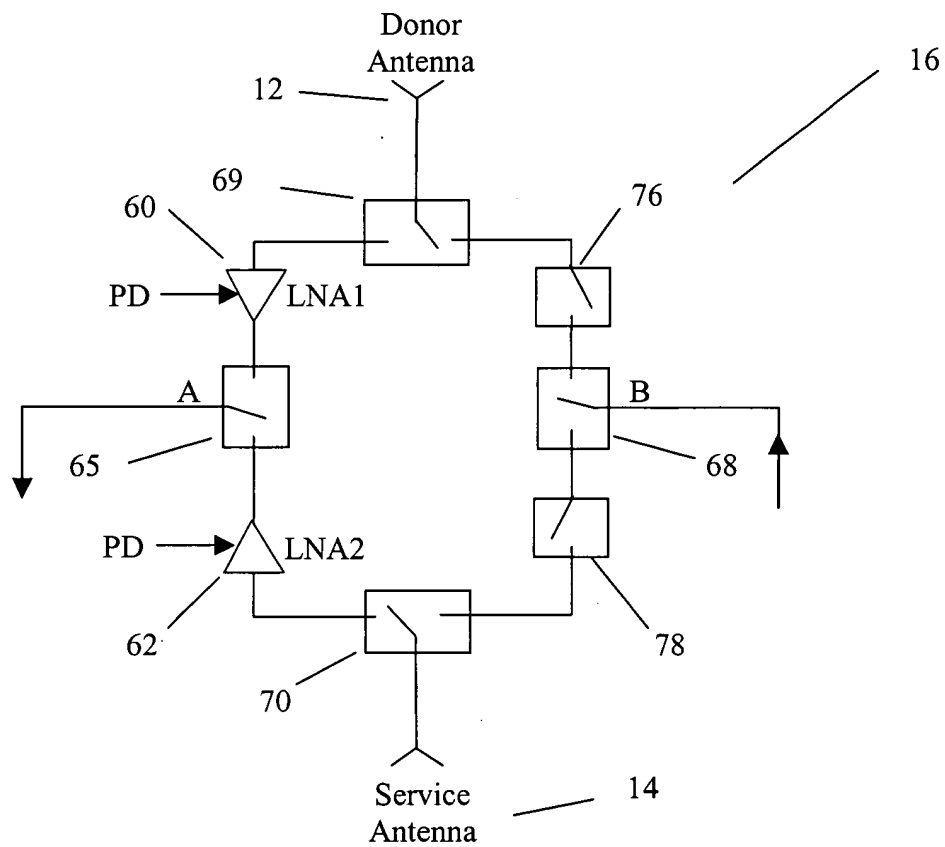


Fig. 5

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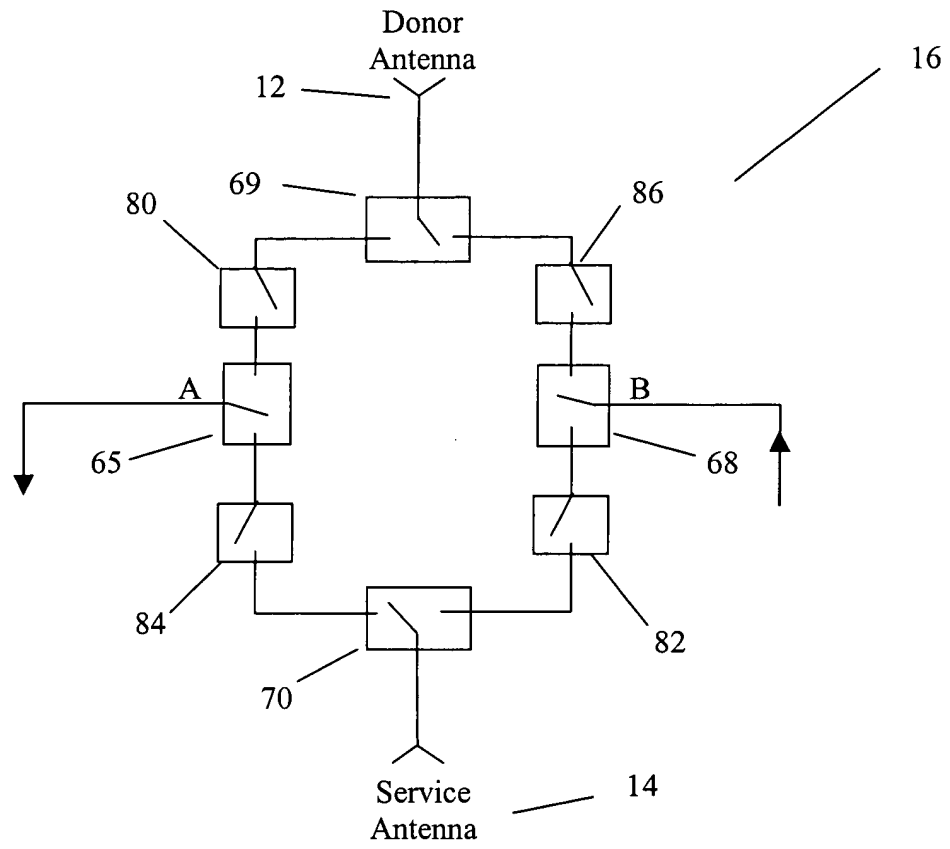


Fig. 6

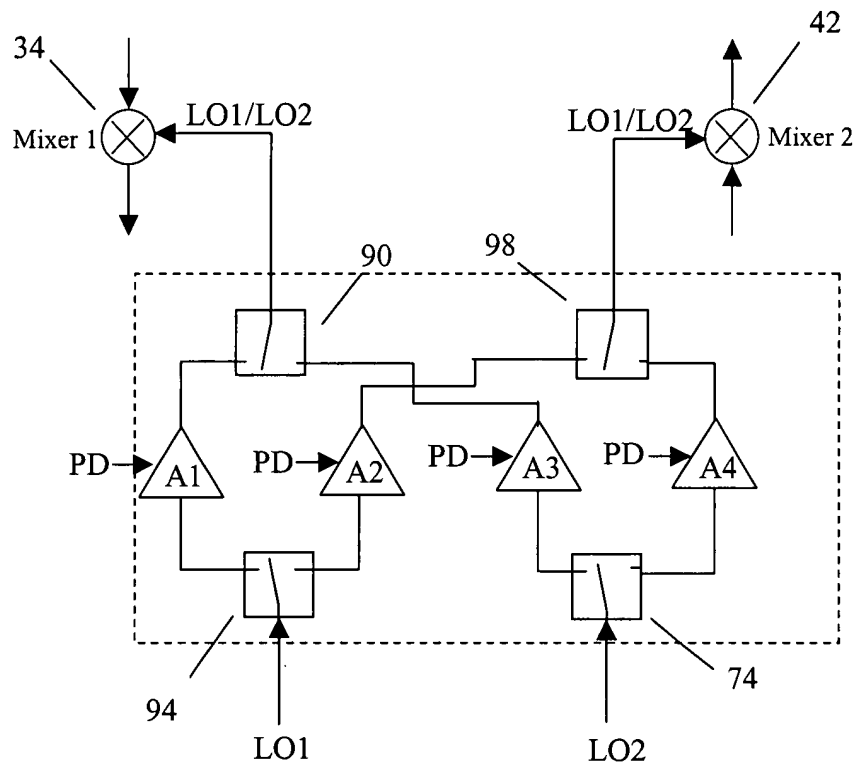


Fig. 7

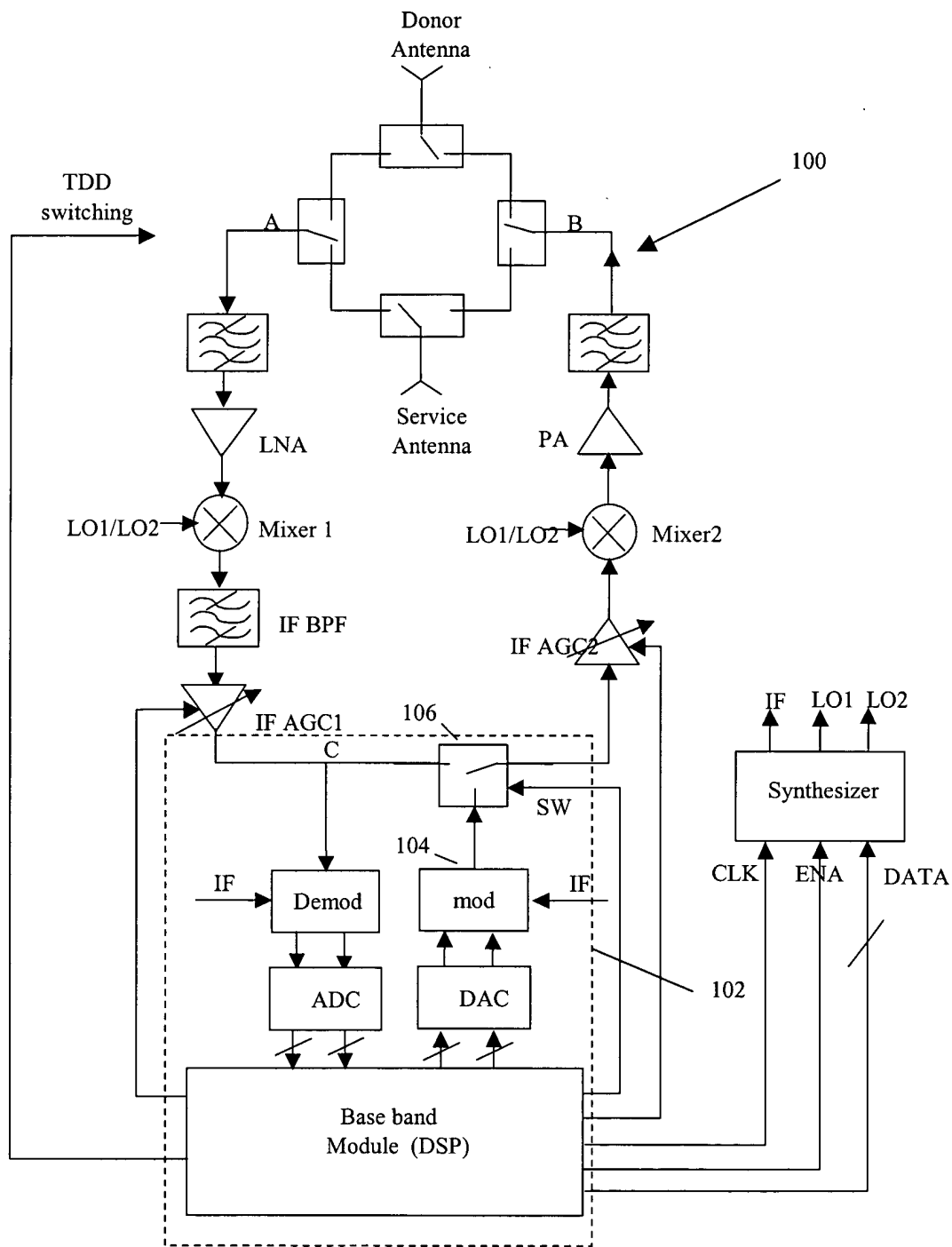


Fig. 8

